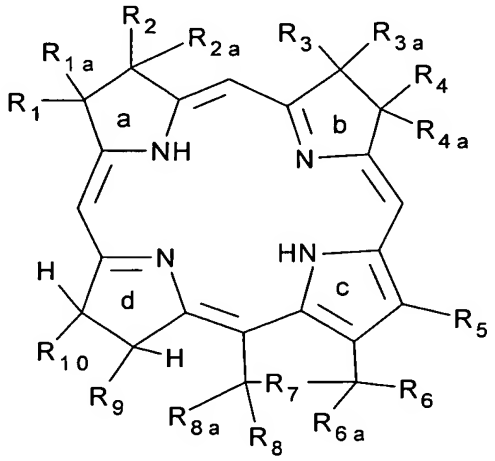
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

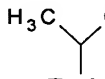
LISTING OF CLAIMS:

Claims 1 and 2 (Cancelled).

3. (Previously presented) A compound of the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

R_1, R_{1a}, R_2, R_{2a}, R_3, R_{3a}, R_4, R_{4a}, R_5, R_6, R_{6a}, R_8, R_{8a}, R_9, and R_{10} are independently hydrogen, lower alkyl of about 1 through 8 carbon atoms, lower alkenyl of about 1 through 8 carbon atoms, or lower alkyl of about 1 through 8 carbon atoms substituted with at least one halogen, hydroxy, carboxy, ester, aromatic, heterocyclic, ether, amide, or amine group; where two R_1, R_{1a}, R_2, R_{2a}, R_4, R_{4a}, R_6, R_{6a}, R_8, R_{8a} R_9 and R_{10} groups on adjacent carbon atoms may be taken together to form a covalent bond or two R_1, R_{1a}, R_2, R_{2a}, R_3, R_{3a}, R_4, R_{4a}, R_6, R_{6a}, R_8, and R_{8a} groups on the same carbon atom may form a double bond to a divalent pendant group; R_1 or R_2 may additionally be -CH=CH_2, -CHO, -COOH, -$COOR_a$, or 

;

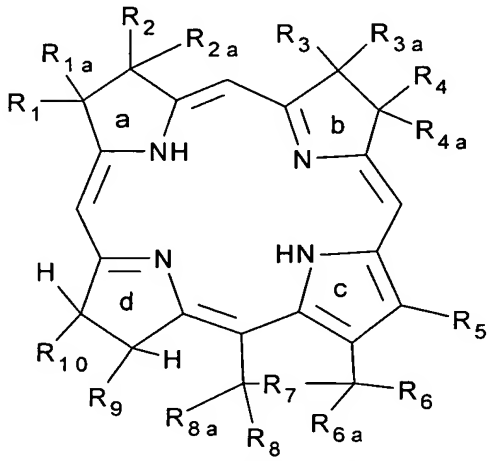
R_7 is -CH_2-, or -N(R_{12})- or a covalent bond, where

R_{11} and R_{12} are independently hydrogen, lower alkyl of about 1 through 8 carbon atoms, lower alkenyl of about 1 through 8 carbon atoms, or lower alkyl of about 1 through 8 carbon atoms substituted with at least one halogen, hydroxy, carboxy, ester, aromatic, heterocyclic, ether, amide, or amine group;

provided that at least one of R_1, R_{1a}, R_2, R_{2a} R_3, R_{3a}, R_4, R_{4a}, R_5, R_5, R_6, R_{6a} R_7, R_8, R_{8a}, R_9 and R_{10} contains at least one fluorinated pendant group selected from the group consisting of fluorinated alkyl groups, fluorinated phenyl groups and fluorinated heterocyclic moieties.

4. (Original) The compound of claim 3 wherein R_9 is $-CH_2CH_2CO_2R_a$, where R_a is hydrogen or lower alkyl of 1-8 carbons.

5. (Original) A compound of the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

R_1 and R_2 are each independently substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, $-C(O)R_a$ or $-COOR_a$, where R_a is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, or substituted or unsubstituted cycloalkyl;

R_{1a} and R_{2a} are each independently hydrogen or substituted or unsubstituted alkyl, or together form a covalent bond;

R_3 and R_4 are each independently hydrogen or substituted or unsubstituted alkyl;

R_{3a} and R_{4a} are each independently hydrogen or substituted or unsubstituted alkyl, or together form a covalent bond;

R_5 is hydrogen or substituted or unsubstituted alkyl;

R_6 and R_{6a} are each independently hydrogen or substituted or unsubstituted alkyl, or together form =O;

R_7 is a covalent bond, alkylene, azaalkyl, or azaaralkyl;

R_8 and R_{8a} are each independently hydrogen or substituted or unsubstituted alkyl, or together form =O;

R_9 and R_{10} are each independently hydrogen, or substituted or unsubstituted alkyl;

each of R_1-R_{10}, when substituted, is substituted with one or more substituents each independently selected from Q, where Q is alkyl, haloalkyl, halo, pseudohalo, -$COOR_b$ where R_b is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl or aryl, aryl, heteroaryl, cycloalkyl, heterocyclyl, OR_c where R_c is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, arallkyl, or aryl, $CONR_dR_e$ where R_d and R_e are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl or aryl, NR_fR_g where R_f and R_g are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aralkyl or aryl, $=NR_h$ where R_h is alkyl, alkenyl, alkynyl, cycloalkyl, aralkyl or aryl, or is an amino acid residue;

each Q is independently unsubstituted or is substituted with one or more substituents each independently selected from Q_1, where Q_1 is

alkyl, haloalkyl, halo, pseudohalo, -$COOR_b$ where R_b is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl or aryl, aryl, heteroaryl, cycloalkyl, heterocyclyl, OR_c where R_c is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl or aryl, $CONR_dR_e$ where R_d and R_e are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl or aryl, NR_fR_g where R_f and R_g are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl or aryl, or is an amino acid residue;

with the proviso that the compound contains at least one fluorine atom.

6. (Original) The compound of claim 5, wherein:

R_1 is substituted or unsubstituted alkyl;

R_2 is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, or -$C(O)R_a$, where R_a is substituted or unsubstituted alkyl;

R_{1a} and R_{2a} together form a covalent bond;

R_3 and R_4 are each independently substituted or unsubstituted alkyl;

R_{3a} and R_{4a} are each independently hydrogen, or together form a covalent bond;

R_5 is substituted or unsubstituted alkyl;

R_6 and R_{6a} together form =O;

R_7 is azaalkyl, or azaaralkyl;

R_8 and R_{8a} together form =O;

R_9 and R_{10} are each independently substituted or unsubstituted alkyl;

each of R_1-R_{10}, when substituted, is substituted with one or more substituents each independently selected from Q, where Q is halo, pseudohalo, haloalkyl, $COOR_b$ where R_b is hydrogen or alkyl, OR_c where R_c is alkyl or aralkyl, NR_fR_g where R_f and R_g are each independently hydrogen, alkyl or aralkyl, or $=NR_h$ where R_h is aralkyl;

each Q is independently unsubstituted or is substituted with one or more substituents each independently selected from Q_1, where Q_1 is halo, pseudohalo, or haloalkyl.

7. (Original) The compound of claim 5 or claim 6, wherein:

R_1 is unsubstituted alkyl;

R_2 is substituted or unsubstituted alkyl, unsubstituted alkenyl, or -$C(O)R_a$, where R_a is unsubstituted alkyl;

R_{1a} and R_{2a} together form a covalent bond;

R_3 and R_4 are each independently unsubstituted alkyl;

R_{3a} and R_{4a} are each independently hydrogen, or together form a covalent bond;

R_5 is unsubstituted alkyl;

R_6 and R_{6a} together form =O;

R_7 is azaalkyl, or azaaralkyl;

R_8 and R_{8a} together form =O;

R_9 is substituted alkyl;

R_{10} is unsubstituted alkyl;

each of R_1-R_{10}, when substituted, is substituted with one or more substituents each independently selected from Q, where Q is halo, pseudohalo, haloalkyl, $COOR_b$ where R_b is hydrogen or alkyl, OR_c where R_c is alkyl or aralkyl, NR_fR_g where R_f and R_g are each independently hydrogen, alkyl or aralkyl, or $=NR_h$ where R_h is aralkyl;

each Q is independently unsubstituted or is substituted with one or more substituents each independently selected from Q_1, where Q_1 is halo, pseudohalo, or haloalkyl.

8. (Previously presented) The compound of any one of claims 5-7, wherein:

R_1 is methyl;

R_{1a} and R_{2a} together form a covalent bond;

R_3 is methyl;

R_4 is ethyl;

R_{3a} and R_{4a} are each independently hydrogen, or together form a covalent bond;

R_5 is methyl;

R_9 is CH_2CH_2COOH or CH_2CH_2COOMe; and

R_{10} is methyl.

9. (Original) The compound of any one of claims 5-8, wherein:

R_2 is $CH=CH_2$, $CH(OR_{20})CH_3$, C(O)Me, $C(=NR_{21})CH_3$ or $CH(NHR_{21})CH_3$;

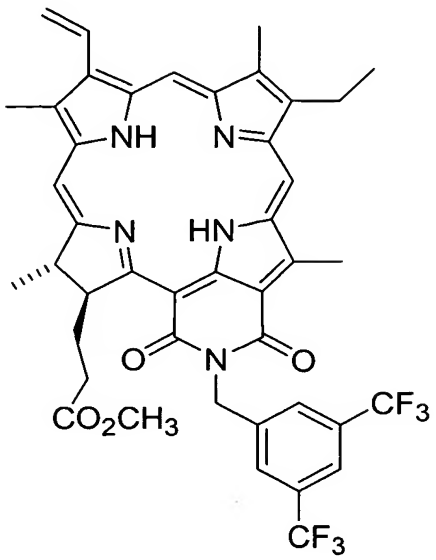
where R_{20} is methyl, butyl, heptyl, dodecyl or 3,5-bis(trifluoromethyl)-benzyl; and

R_{21} is 3,5-bis(trifluoromethyl)benzyl.

10. (Original) The compound of any one of claims 5-9, wherein:

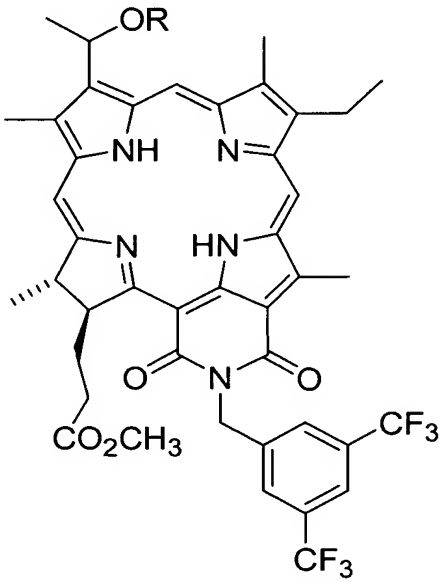
R_7 is $=NR_{20}$, where R_{20} is methyl, butyl, heptyl, dodecyl or 3,5-bis(trifluoromethyl)benzyl.

11. (Original) A compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof.

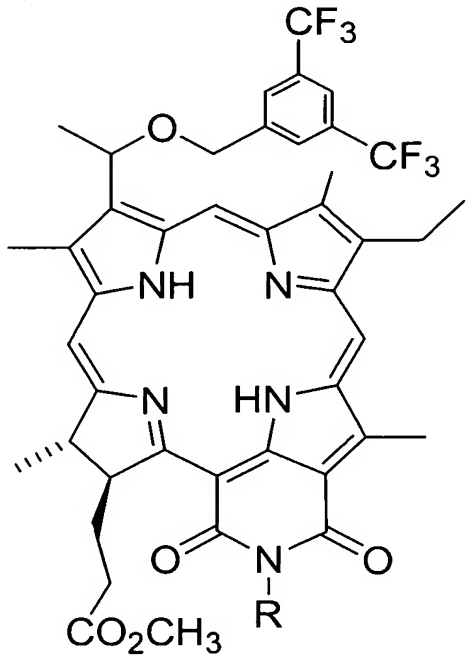
12. (Original) A compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

R is methyl, butyl, heptyl or dodecyl.

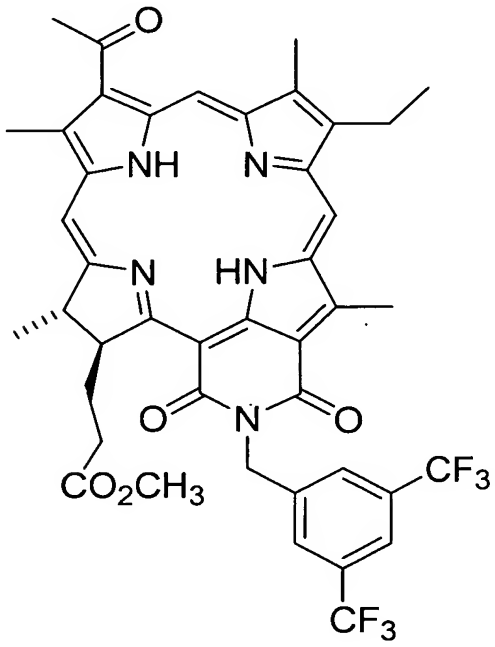
13. (Original) A compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

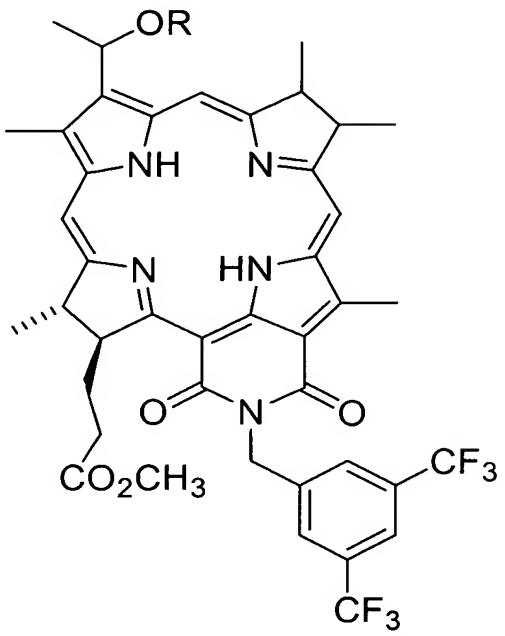
R is methyl, butyl, heptyl or dodecyl.

14. (Original) A compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof.

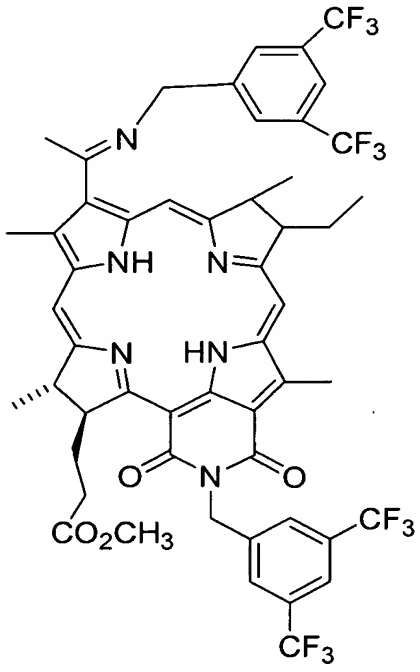
15. (Original) A compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

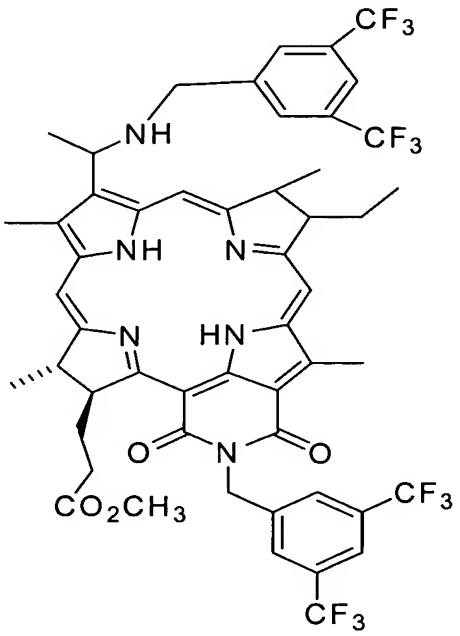
R is methyl, butyl, heptyl or dodecyl.

16. (Original) A compound of claim 5 having the formula:



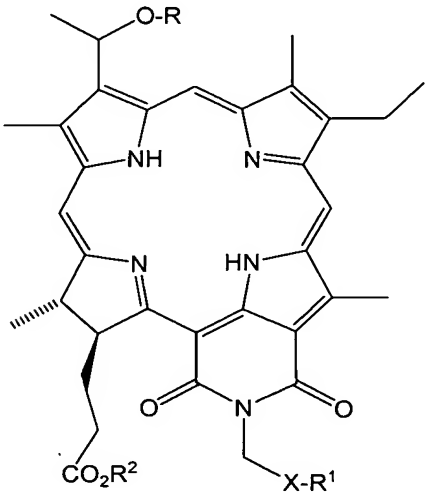
or a pharmaceutically acceptable derivative thereof.

17. (Original) A compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof.

18. (Original) A compound of claim 5 having the formula



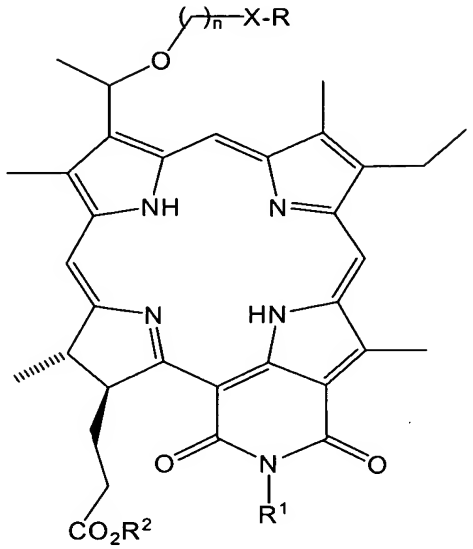
or a pharmaceutically acceptable derivative thereof, wherein:

X is an aryl or heteroaryl group;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1-20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

19. (Original) A compound of claim 5 having the formula



or a pharmaceutically acceptable derivative thereof, wherein:

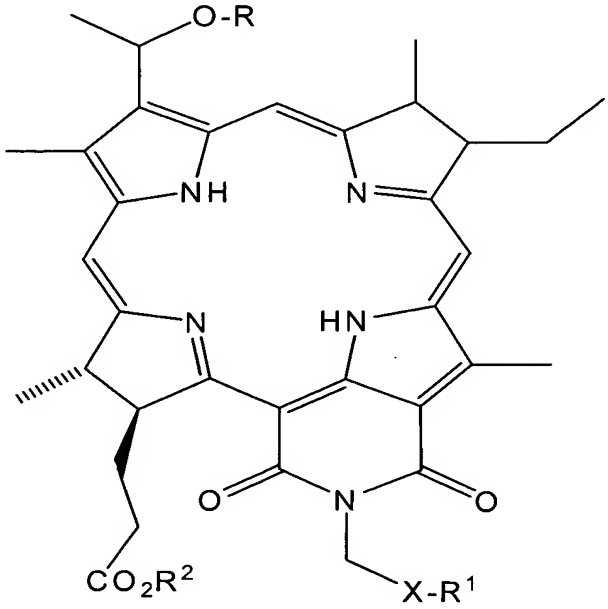
X is an aryl or heteroaryl group;

n is an integer from 0 to 6;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1-20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

20. (Original) A compound of claim 5 having the formula



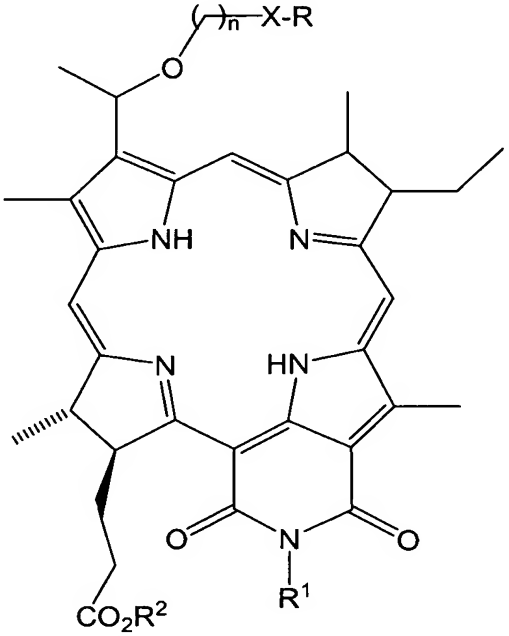
or a pharmaceutically acceptable derivative thereof, wherein:

X is an aryl or heteroaryl group;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1-20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

21. (Original) A compound of claim 5 having the formula



or a pharmaceutically acceptable derivative thereof, wherein:

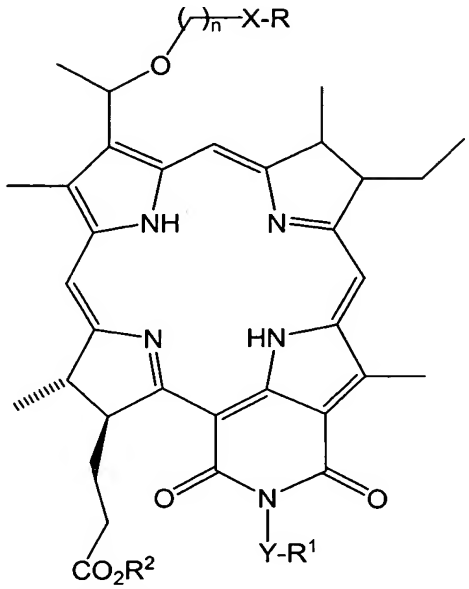
X is an aryl or heteroaryl group;

n is an integer from 0 to 6;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1-20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

22. (Original) A compound of claim 5 having the formula



or a pharmaceutically acceptable derivative thereof, wherein:

X and Y are each independently an aryl or heteroaryl group;

n is an integer from 0 to 6;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1-20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

23. (Previously presented) A pharmaceutical composition, comprising a compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof in a pharmaceutically acceptable carrier.

24. (Previously presented) An article of manufacture, comprising packaging material and a compound of any one of claims 3-22 or a pharmaceutically acceptable derivative of a compound of any one of claims 3-22 contained within the packaging material, wherein the compound or salt thereof is effective in a photodynamic therapy treatment for ameliorating the symptoms of a hyperproliferative disorder; and the packaging material includes a label that indicates that the compound or salt thereof is used in a photodynamic therapy treatment for ameliorating the symptoms of a hyperproliferative disorder.

25. (Previously presented) The compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof when used for the treatment of hyperproliferative tissue.

26. (Previously presented) The compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof when used to detect a hyperproliferative tissue.

27. (Original) The compound of any one of claims 17-19 or a pharmaceutically acceptable derivative thereof when used for the detection or treatment or both of hyperproliferative tissue.

28. (Previously presented) The compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof when used in a photodynamic therapy.

29. (Previously presented) The compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof when used to destroy a target composition within a subject.

30. (Previously presented) Use of the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof for formulation of a medicament for the treatment of hyperproliferative disorders.

31. (Previously presented) A method for administering a therapy to a target, comprising:

(i) administering to a subject the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof that preferentially associates with the target, and

(ii) irradiating the subject with light of a wavelength and total fluence sufficient to produce a therapeutic effect.

32. (Original) The method of claim 31, wherein the target is selected from the group consisting of: a vascular endothelial tissue, a neovasculature tissue, a neovasculature tissue present in an eye, an abnormal vascular wall

of a tumor, a solid tumor, a tumor of a head, a tumor of a neck, a tumor of an eye, a tumor of a gastrointestinal tract, a tumor of a liver, a tumor of a breast, a tumor of a prostate, a tumors of a lung, a nonsolid tumor, malignant cells of one of a hematopoietic tissue and a lymphoid tissue, lesions in a vascular system, a diseased bone marrow, and diseased cells in which the disease is one of an autoimmune and an inflammatory disease.

33. (Original) The method of claim 31, wherein the target composition is selected from the group consisting of bacteria, viruses, fungi, protozoa, and toxins.

34. (Original) The method of claim 31, further comprising the step of allowing sufficient time for any of the compound that is not preferentially associated to the target tissue to clear from non-target tissue of the subject prior to the step of irradiating.

35. (Original) The method of claim 31 wherein the compound is conjugated to a targeting agent.

36. (Original) The method of claim 35 wherein the targeting agent is one of an antibody or an antibody fragment that is specific in binding with the target tissue.

37. (Original) The method of claim 35 wherein the targeting agent is a peptide that is specific in binding with the target tissue.

38. (Original) The method of claim 35, wherein the targeting agent is a liposomal preparation.

39. (Previously presented) A method of photodynamic therapy for treating hyperproliferative tissue in a subject, comprising:

(i) administering to the subject the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof that preferentially associates with the hyperproliferative tissue, and

(ii) irradiating the subject with light of a wavelength and fluence sufficient to activate the compound, whereby the hyperproliferative tissue is destroyed or impaired.

40. (Previously presented) A method for detecting the presence of a hyperproliferative tissue in a subject comprising:

(i) administering to the subject a sufficient quantity of the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof that preferentially associates with the hyperproliferative tissue; and

(ii) visualizing the compound within the patient.

41. (Original) The method of claim 40 wherein the step of visualizing is accomplished by generating an MRI image of at least a part of the patient's body.

42. (Original) The method of claim 40 wherein the step of visualizing is accomplished by exposing the conjugated compound with light of sufficient energy to cause the compound to fluoresce.

43. (Previously presented) A method for detecting a target in a biological sample, comprising:

(i) adding to the biological sample the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof that binds to the target; and

(ii) detecting the compound.

44. (Original) The method of claim 43, wherein the biological sample is selected from the group consisting of blood, urine, saliva, tears, synovial fluid, sweat, interstitial fluid, sperm, cerebrospinal fluid, ascites fluid, and/or tumor tissue biopsy and circulating tumor cells.

45. (Previously presented) A method of diagnosing an infecting agent in a patient, comprising:

(i) conjugating to any one of the compounds of claims 3-22 or a pharmaceutically acceptable derivative thereof a targeting agent specific for the infecting agent, whereby a conjugated compound is formed;

(ii) administering to the patient the conjugated compound; and

(iii) visualizing the conjugated compound within the patient.

46. (Original) The method of claim 45 wherein the step of visualizing is accomplished by generating a MRI image of at least a part of the patient's body.

47. (Original) The method of claim 45 wherein the step of visualizing is accomplished by exposing the conjugated compound with light of sufficient energy to cause the compound to fluoresce.

48. (Previously presented) A method of generating an image of a target tissue or target composition in a subject, comprising:

(i) administering to the subject the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof ; and

(ii) generating an image of at least a part of the subject to which the compound has preferentially associated.

49. (Original) The method of claim 48 wherein the image is a nuclear imaging image.

50. (Previously presented) A method of labeling a target tissue for diagnostic radiology, comprising:

(i) administering to a subject the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof; and

(ii) allowing sufficient time for any compound that is not preferentially associated to the target tissue to clear from non-target tissue of the subject, whereby the target tissue can be distinguished from non-target tissue in an MRI image of the subject.

51. (Previously presented) A method of providing a medical therapy to an animal, comprising:

(i) administering to the animal the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof, and

(ii) irradiating the animal with light of a wavelength and fluence sufficient to activate the compound, whereby the hyperproliferative tissue is destroyed or impaired.

52. (Previously presented) The compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof when used for the labeling of a target tissue for diagnostic radiology.

53. (Previously presented) A kit to treat hyperproliferative disorders, comprising the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof and instructions teaching a method of photodynamic therapy.

54. (Previously presented) A kit to label specific tissues for diagnostic radiology, comprising the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof and instructions teaching a method of magnetic resonance imaging.

55. (Previously presented) A combination, comprising:

the compound of any one of claims 3-22 or a pharmaceutically acceptable derivative thereof ; and

a light source.

56. (Previously presented) A combination, comprising:

the compound of any one of claims 3-22 or pharmaceutically acceptable derivatives thereof ; and

a magnetic resonance imaging device.